

Claims

What is claimed is:

*Sub A*  
1 In a video display system comprising a video display unit associated with a remote control device, a method for updating a remote control database in the remote control device comprising the steps of:

5 receiving from a video display unit by a remote control device, a transmission signal comprising a database portion for updating a first database provided in the remote control device; and

10 modifying according to the database portion a remote control protocol for the remote control device by replacing or augmenting the first database with a second database.

2. The method of Claim 1 further comprising the step of:

15 generating the database portion by decoding a video signal, wherein the database portion is encoded in a video blanking interval or sub-picture portion of the video signal.

3. The method of Claim 1 further comprising the step of:

storing the database portion in a memory for the display unit.

20 4. The method of Claim 3 wherein:

a compression layer is stored in the memory.

5. The method of Claim 1 wherein:

the remote control protocol is provided through the transmission signal, which comprises an infra-red (IR) or radio frequency (RF) signal that is received by the remote control unit.

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6. The method of Claim 1 wherein:

the remote control protocol is provided through the transmission signal, which comprises a wired signal that is received by the remote control unit according to a Universal Serial Bus (USB) or 1394 format.

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7. The method of Claim 1 further comprising the step of:

operating the remote control device according to the modified remote control protocol.

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8. The method of Claim 1 further comprising the step of:

providing a user request to initiate the remote control database update.

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9. The method of Claim 1 further comprising the step of:  
programmably providing a user interface button.

10. Apparatus for re-configuring remote control device protocol comprising:  
a digital television controller for processing a video signal to extract a database portion therefrom; and

an interface for providing to a remote control unit the database portion, wherein a remote control protocol of the remote control unit is modifiable according to the database portion.

5        11. The apparatus of Claim 10 wherein:

the database portion is encoded in a video blanking interval or sub-picture of the video signal, such that the controller extracts the database portion by decoding the video signal.

10      12. The apparatus of Claim 10 further comprising:

a digital repository for storing the database portion.

13. The apparatus of Claim 10 wherein:

the interface comprises an infra-red (IR) emitter or radio frequency (RF) transmitter for communicating wirelessly to the remote control unit.

14. The apparatus of Claim 10 wherein:

the interface comprises a communication circuit for communicating over a wired link to the remote control unit.

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15. Video signal processing method comprising the steps of:  
3        in a media source, providing a television program signal; and

encoding in a video blanking interval (VBI) or sub-picture of the television program signal a database portion to generate an embedded data signal, wherein the database portion comprises one or more selected remote control protocols.

5        16. The method of Claim 15 wherein:

the data signal is stored in a video tape or disk.

17. The method of Claim 15 wherein:

10      the data signal is processed by a video player or appliance for display by a television unit.

18. The method of Claim 15 further comprising the step of:

15      controlling a home entertainment component by a remote control unit which is programmed according to a selected remote control protocol associated with the database portion.